



## MEDICAMENT CARTRIDGE AND INJECTION DEVICE

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## **ABSTRACT**

The present invention discloses a medicament cartridge for an injection device, such as a syringe or a jet injector. The medicament cartridge according to the present invention includes a tube having a lumen, a needle operatively associated with an end of the tube and having a piercing end extending into the lumen, a second stopper located within the lumen near the other end of the tube and moveable within the lumen, and a first stopper located within the lumen, covering the piercing end of the needle, and moveable within the lumen. Firing the injection device to commence an injection may move the second stopper toward the needle, which compresses medicament located in the lumen between the first stopper and the second stopper. The compression of the medicament moves the first stopper into contact with the piercing end of the needle so that the piercing end pierces the first stopper to thereby create a fluid pathway for the medicament through the needle. Other methods of piercing the first stopper are anticipated as a means of activating the injection device. The disclosed medicament cartridge can be safely and aseptically manufactured and filled during assembly and, once manufactured and filled, eliminates contact between the medicament and the needle during storage.

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